

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re the Application of HASHIMOTO Attorney Docket No. 1382-TC-378

Application No. Not yet Assigned

Filed: January 10, 2002

For: HYDRAULIC TENSIONER

PRELIMINARY AMENDMENT

Please amend the above-entitled application as follows:

Amend claims 6, 7 and 8 as set forth in **Attachment A-1**. A clean copy of the claims as amended is set forth in **Attachment A-2**.

REMARKS

The claims have been amended to eliminate multiple dependency. It is believed that the application is now in condition for examination.

Respectfully submitted,

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Enc: Attachments A-1, A-2

Please amend claims 6, 7 and 8 as follows:

6. A hydraulic tensioner according to [any one of preceding claims] claim 1, wherein a ratchet pawl body to be engaged with a ratchet tooth engraved in the outside surface of the plunger is rockably provided on said body by spring energization in order to prevent the backward displacement of the plunger,

a cutout for rocking the ratchet pawl body engageably with the ratchet tooth and a pair of protruding pieces extending outward from the cutout end are formed on said cylinder, and the ratchet pawl body is supported by a shaft inserted to mount holes formed in the protruding pieces and a mount hole formed in the body.

7. A hydraulic tensioner according to [any one of preceding claims] claim 1, wherein said body is made by die-casting and said cylinder is made of steel iron.

8. A hydraulic tensioner according to [any one of preceding claims] claim 1, wherein said body is made by synthetic resin molding and said cylinder is made of steel iron.

1. A hydraulic tensioner comprising a metallic cylinder fitted to a cylindrical hole formed in a body, a plunger provided within the cylinder so as to be energized by a compression spring to protrude the tip from the body, and a pressure oil chamber formed between the inner part of the plunger and the cylinder,
said cylinder being provided with a bottom plate having a through-hole allowing the inflow of oil in the center, and the bottom plate being prevented from dropping out from the body by being engaged by said compression spring.

2. A hydraulic tensioner according to claim 1 wherein said cylindrical hole is provided with a cylindrical hole smaller in diameter than this cylindrical hole on the bottom side, and a check valve mechanism fitted to the minor-diameter cylindrical hole is prevented from dropping out by the abutment on the bottom plate of said cylinder.

3. A hydraulic tensioner comprising a metallic cylinder fitted to a cylindrical hole formed in a body, a plunger provided within the cylinder so as to be engaged by a compression spring to protrude the tip from the body, a pressure oil chamber formed between the inner part of the plunger and the cylinder, and a check valve mechanism allowing the inflow of oil to the pressure oil chamber but arresting the back flow thereof, wherein

said cylinder is provided with a bottom plate having a through hole allowing the inflow of oil in the center, and the bottom plate being prevented from dropping out from the body by being energized by said compression spring;

said check valve mechanism comprises a check ball provided so as to block an inflow hole of oil to the pressure oil chamber from above and a spring for energizing the check ball; and

said spring is supported by said bottom plate.

4. A hydraulic tensioner according to claim 3, wherein said check valve mechanism further comprises a lid for supporting the spring and being a preliminary assembled product, and said lid is supported by said bottom plate.

5. A hydraulic tensioner comprising a metallic cylinder fitted to a cylindrical hole formed in a body, a plunger provided within the cylinder so as to be energized by a compression spring to protrude the tip from the body, a pressure oil chamber formed

between the inner part of the plunger and the cylinder, and a check valve mechanism allowing the inflow of oil to the pressure oil chamber but arresting the back flow thereof,

 said cylinder being provided with a bottom plate having a through-hole allowing the inflow of oil in the center, the bottom plate being prevented from dropping out from the body by being engaged by said compression spring through the retainer of said check valve mechanism, and

 said check valve mechanism comprising a check ball provided so as to block the through-hole formed in the bottom plate from above, a spring for energizing the check ball and a retainer for supporting the spring.

6. (Amended) A hydraulic tensioner according to claim 1 wherein a ratchet pawl body to be engaged with a ratchet tooth engraved in the outside surface of the plunger is rockably provided on said body by spring energization in order to prevent the backward displacement of the plunger,

 a cutout for rocking the ratchet pawl body engageably with the ratchet tooth and a pair of protruding pieces extending outward from the cutout end are formed on said cylinder, and the ratchet pawl body is supported by a shaft inserted to mount holes formed in the protruding pieces and a mount hole formed in the body.

7. (Amended) A hydraulic tensioner according to claim 1, wherein said body is made by die-casting and said cylinder is made of steel iron.

8. (Amended) A hydraulic tensioner according to claim 1, wherein said body is made by synthetic resin molding and said cylinder is made of steel iron.